Technical Note No. 33

IMPACT EVALUATION PROPOSAL
Proposal for Development of an Impact Evaluation System for Implementation of Cost Recovery in the Public Health System of the Central African Republic

Submitted to:

Policy and Sector Reform Division
Office of Health and Nutrition
Center for Population, Health and Nutrition
Bureau for Global Programs, Field Support and Research
Agency for International Development

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SEPTEMBER 1994

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AID Contract No. DPE-5974-Z-00-9026-00

ABSTRACT

This paper offers a brief review of the fee structure proposed in 1994 for cost recovery for provision of inpatient and outpatient health services and medicines in the Central African Republic (CAR). It proposes a system to evaluate the impact of the proposed fee structure, particularly in two key areas: the financial impact of civil servants on the health care system, and the effects of the fees on indigents' utilization of the health care system.

ACKNOWLEDGMENTS

This proposal is based on field data collected by the author in the Central African Republic (CAR) in July 1994. The author visited several health facility sites in Bangui and the regions and held extensive interviews with Dr. Emmanuel Nguembi, the Resident Advisor responsible for Cost Recovery for the Child Survival Program, as well as numerous staff members of the Ministry of Public Health and Population. Mr. Yann Derriennic, HFS consultant; Mr. James Setzer, HFS consultant and Associate Professor at Emory University in Atlanta; and Dr. Charlotte Leighton, HFS Technical Director, provided comments and suggestions on the final proposal. The author is grateful for the information and advice provided by HFS staff and all those whom she met in the CAR.

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EXECUTIVE SUMMARY

The Ministry of Public Health and Population of the Central African Republic (MOH CAR) requested technical assistance from the Health Financing and Sustainability Project (HFS) to develop and implement a national fee structure in health services and medicines. With implementation of a fee structure, it becomes necessary to develop and implement a system to monitor basic indicators that track the impact of cost recovery activities on revenues in health care facilities and on the utilization of health care services by the general population.

Within the CAR, the impact must be closely monitored in two specific areas: the financial impact of civil servants on the health care system, and the impact of the introduction of a cost recovery system (fees) on indigents.

Civil servants currently are entitled to a subsidy of 80 percent of the cost for hospitalization; they pay 20 percent to the facility, and the government is responsible for paying the other 80 percent. Because of the recent, ongoing government fiscal crisis, the facilities have not received the 80 percent. Thus, it is critical to the financial health of the facilities to track the impact of this nonpayment and to find solutions to this problem.

It is also important to assess the impact of the introduction of a fee system on the utilization of the public health system by indigents. If fees prove to be a barrier to a substantial number of patients, the government will have to respond. The impact of the indigents on the financial well-being of the facilities also must be considered.

The proposed impact evaluation system is simple and straightforward. It is concerned with a minimum number of indicators that provide information on revenue, equity, and quality of care. It is also administratively feasible and sustainable.

The proposed impact evaluation system would be implemented through a sentinel system and would require personnel at health facilities to complete monthly forms. The forms then would be analyzed by members of the central MOH Health Financing and Sustainability Unit (Cellule de Financement et Pérennité de la Santé — the HFS Unit). Members of the Unit would provide feedback to health facilities regarding cost recovery updates, processes, problems, or successes. It is then anticipated that the impact evaluation system would be incorporated into a national health statistics system to ensure sustainability and utility.

1.0 BACKGROUND: REVIEW OF PROPOSED FEE STRUCTURE

Since 1989, Abt Associates Inc. has provided short- and long-term technical assistance to the Ministry of Public Health and Population (MOH) in the Central African Republic (CAR) to develop and undertake related analyses of a national cost recovery policy. This assistance has been provided through the Health Financing and Sustainability Project (HFS). During an HFS mission to the CAR in November and December 1993, MOH requested that HFS develop a fee structure and pricing system for inpatient and outpatient health services and medicines that could be applied in a nationwide cost recovery program. Based on criteria set by MOH at a 1989 workshop on cost recovery, the proposed HFS fee structure was to address and meet the following principles:

- Equity for different income levels and regions of the country
- Access to care (geographic and operational)
- Resources sufficient to improve quality
- Administrative feasibility
- Efficiency

In addition, MOH emphasized that the fee structure and price levels needed to represent a balance between 1) the population's ability and willingness to pay and 2) the costs of providing health services.

The resulting fee structure was proposed and modified in a workshop in April 1994 and discussed with the Minister of Health in May 1994. Under this structure, patients will pay the full cost of all inpatient and outpatient medicines at all levels of the health system. In addition, for outpatient services, patients will pay a consultation fee and for laboratory tests. When minor outpatient surgery is needed, patients will pay a fee for the surgery rather than the consultation fee. For inpatient services, patients will pay a single daily hospitalization fee that will vary only with the type of accommodation and a separate, additional fee for child delivery services.

Revenues collected at health facilities through the sale of medicines and service fees will be used first and foremost to resupply medicines and to support the medicine distribution and stock system. The balance of revenues should be used to pay for quality improvements. In order of priority, these improvements include 1) essential medical supplies and equipment, 2) quality improvements, and 3) personnel performance incentives.

2.0 PROPOSED IMPACT EVALUATION SYSTEM

The proposed impact evaluation system explained here is one component of the draft implementation plan for cost recovery developed by an MOH work group and HFS team in July 1994. As such, the impact evaluation system will fall under the responsibility of the Health Financing and

Sustainability Unit, or HFS Unit (Cellule de Financement et Perennité de la Santé). Because the national health information system (Système National d'Information Sanitaire, SNIS) suffers limitations and operating difficulties, including the lack of specific data on civil servants and indigents, it cannot be used for impact monitoring. Therefore, it is recommended that the evaluation system be implemented at a chosen number of sentinel health facility sites.

The short-term impact evaluation system will be simple and straightforward and will be concerned with a minimum number of indicators that provide information on revenue, equity, access, and quality of care. Management personnel at each of the chosen sentinel sites will be responsible for completing monthly reports — the format of which are to be designed by the HFS Unit — which collect relevant information. Monthly reports from the field will be sent directly to the HFS Unit's central office in Bangui for analysis by Unit members. It then becomes the responsibility of the Unit to supply feedback and to disseminate pertinent information to appropriate constituents. It is anticipated that sustainability of the impact evaluation system will be achieved with its incorporation into the national health information system (SNIS).

While an established health information system offers an opportunity to acquire a wide range of information regarding the health of the population, the specific short-term objective of this impact evaluation system is to provide information regarding 1) revenues at health facilities and 2) utilization of services by the population (paying special attention to indigents and civil servants). Ultimately, information obtained through the impact evaluation system will be valuable in determining several key elements in long-term health service delivery and financing trends.

The following are the indicators to be tracked by the impact evaluation system for the selected sentinel sites on a monthly basis:

- Revenue
  - Total revenue received from services
  - Total revenue received from sales of drugs
  - Total revenues from other non-fee sources
- Equity and Access
  - Number of initial outpatient visits, distributed by gender and age (adult, child)
  - Number of return visits
  - Number of inpatient days
  - Number of visits from indigents
  - Number of visits from civil servants
- Quality
  - Total expenditures for drugs
  - Total expenditure for other non-drug recurrent costs
  - Total monthly unfilled prescriptions due to drug stock-outs

2.1 Revenue

One objective of cost recovery is to implement a fee schedule to recover part of the non-salary recurrent costs in the public health sector. In other words, one of the desired outcomes of a cost recovery system is to generate revenue. The ability of the system to track revenue can be determined with an impact evaluation system.

According to the proposed fee structure, outpatient fees will be set at three levels, depending on the qualifications of the care provider (specialist, professor, generalist, or TSS). Patients who are admitted for inpatient care at hospitals will pay a flat hospitalization fee for every day they are in the hospital. The daily fee will vary based on the type of accommodation. At health facilities without highly specialized staff, such as health centers and posts, patients will pay a consultation fee.

- Total revenue from services and from drugs should be totalled and independently recorded.

  Health personnel or health facility managers in the larger hospitals will keep daily records of actual revenue. Therefore, completion of the monthly reports should not be too time-consuming. Due to unique payment policies for civil servants and indigents, there will be a mismatch between the total monthly expected revenue based on utilization data, and the actual monthly revenue. Comparing the two amounts will illustrate both the impact of civil servant utilization on revenues of the facilities and the impact of the cost recovery system on those from the lowest income groups (indigents).

  This data also will enable facilities to request reimbursement from the government for the civil servants, and, in certain cases, for the indigents from municipalities. Further, it is necessary to record the actual monthly revenue received since this is the revenue that eventually will be used to cover non-salary recurrent costs in the individual health facilities.

  It is important to note that revenue will be generated not only by the provision of services, but also by the sale of drugs. The financial manager at the health facility needs to track the total revenue received from each stream separately.

  This information will be extremely useful to managers, management committees, and hospital boards. It will show whether pharmacies are generating excess revenue, breaking even, or using service-generated revenue to resupply their stocks. Since the top priority for facility revenue is to resupply medicines and to support the medicine distribution and stock system, knowing exactly how much revenue the drug system generates — or uses — is critical.

- The number of civil servants utilizing health facilities should be totalled and recorded each month.

  A decree dated 1973 established a government-supported health benefits program for civil servants. The government is responsible for paying 80 percent of hospitalization charges, while the civil servant pays the remaining 20 percent. The same payment structure applies for civil servants' immediate family members (spouses and/or children).

Keeping track of the utilization of health services by civil servants and their immediate family members is essential to assessing the overall impact of the 80/20 subsidy scheme on financing of the health care system. However, the current recordkeeping systems in the country do not portray the total impact of the subsidy scheme. Totalling the number of hospitalization days from civil servants and their families each month will demonstrate the impact of the subsidies. Health personnel and managers at health facilities also will have the responsibility of ensuring that, at the least, the 20 percent payment is received.

2.2 Equity and Access

The implementation of fees for services raises concern that those individuals in the lowest income groups will no longer have access to care. Within the CAR, there is no formal written exoneration policy for indigents — there is, in fact, no formal written definition of "indigent." Indigents, therefore, are deemed to be so by local communities, village chiefs, chiefs of quartiers, civil authorities, or social assistance departments. In practices, indigents are the people who absolutely cannot afford health care services and they are the people who receive "certificates of indigence" (certificat d'indigence), which enable them to receive medical care without having to pay in cash. Within the current system, the number of indigents who visit health facilities on a monthly basis cannot be determined because indigents have not been specifically separated from other patients when tabulating monthly visits and hospitalizations.

- The number of indigents utilizing health facilities should be totalled and recorded each month.

  It is important to track visits by indigent patients for two reasons. First, the number of indigents who do not pay in cash will help to justify some of the discrepancies between expected and actual monthly revenue received by health facilities. Second, and more important, it confirms that people in the lowest income groups are still receiving services. The impact evaluation system obviously will not be able to determine how many people are left out of the system, but it can record those who are using the health care system despite having minimal means and the lack of a national exoneration policy.

  The number of indigents who visit health facilities each month is easily determined given the existence of the certificates of indigence. One can count the number of indigent visits simply by counting the number of certificates received and/or seen. The proposed impact evaluation system also will make it possible to estimate the cost of services provided to indigents. Recording the number of indigent visits provides much-needed baseline data on which future policy decisions can be made. For example, if there is a high number of indigent hospital visits each month, the MOH may want to consider a formal exoneration policy for hospitalizations, or they may want to formalize the criteria for receiving a certificate of indigence. Making the local authorities who distribute certificates of indigence ultimately responsible for paying the bills, and requiring them to do so, establishes a disincentive for providing certificates.

- Utilization data should be gathered and analyzed by gender and age.

  Another important set of indicators includes the change in utilization by gender and age. The current health information system tracks this data. It is proposed that this data be closely monitored

to follow the pattern of utilization by certain groups, by women, and by children. While it is impossible to track non-users of the health care system, tracking utilization by certain groups will provide rough indicators of access.

Tracking the total number of visits (initial and return) and hospitalization days each month also will provide baseline data for comparisons among months. The number of visits/days each month is dependent upon seasonal morbidity, the perceived quality of care, epidemics and income levels of individuals. If the total numbers begin to drastically change, however, it will be necessary to investigate why. A decline in visits/days may be due to high prices for services, to drug unavailability, or elimination of frivolous utilization. An increase in visits/days may be due to an epidemic, wider drug availability, or an improvement in the delivery of care.

2.3 Quality of Care

One of the principal goals of the national cost recovery policy is to provide additional revenue to improve the quality of care. The proposed impact evaluation system provides an opportunity to track several quality of care components.

Research has shown that it is not only the price that determines whether or not people will pay for health care services. Other factors that strongly affect the demand for health care include availability of drugs, cleanliness of the facility, and waiting time. When the proposed public awareness campaigns begin to inform the population about cost recovery measures, an attempt will be made to convince the public that essential drugs will be available and that the quality of care will improve. While limited resources make it difficult to monitor such quality of care as waiting times and facility cleanliness, it is possible to track the availability of drugs.

- The number of unfilled prescriptions due to lack of stock needs to be totalled and recorded each month.

  If patients arrive at the pharmacy to have prescriptions filled but do not receive their medication because the drug is not in stock, that is a reflection of the quality of care those patients have received and of the quality of care available at that particular health facility. The new cost recovery policy depends largely on the availability of low-cost generic drugs. When prescriptions are not filled due to a lack of stock, managers at those facilities need to determine the cause. Tracking the number of prescriptions that remain unfilled each month due to lack of stock will illustrate whether there are problems with the drug stock/distribution system and their magnitude.

  Collecting this information is not difficult. It simply involves asking the pharmacist/drug dispenser to record every instance where drugs cannot be given to a patient because of shortages. Members of the Central HFS Unit will be the individuals who calculate how many patients are denied care due to a lack of drugs; pharmacists only must say how often they are unable to fill a prescription due to a lack of stock.

- Expenditures for recurrent expenses should be tracked by major categories; the sources of funds for these expenditures should be tracked; and the ratio of facility-based revenues to government-provided revenue should be monitored.

Recurrent expenditures that are important to the quality of care are disbursements for other non-drug medical supplies, facility maintenance, and performance bonuses. The amount of expenditures on such recurrent costs is an indicator of how well cost recovery revenues are being used. A resource gap study would examine the difference between what is being spent on recurrent costs and what should be spent to have a fully functional facility. However, the lack of baseline data makes it impossible currently to undertake a resource gap study.

Expenditure indicators should be followed to track their evolution and to develop the baseline data needed to undertake a gap study. It is anticipated that by the second year there will be enough data to undertake such a gap study.

It is also important to track total recurrent expenditures and to monitor the source of revenues for these expenditures. The ratio of government-provided funds versus fee-based funds for recurrent expenditures can be expected to change at the early stages of cost recovery implementation, but it should eventually stabilize. The introduction of cost recovery should not be taken by the government as an opportunity to cut the recurrent cost budget.

3.0 FEASIBILITY AND SUSTAINABILITY OF EVALUATION IMPACT SYSTEM

In addition to being a useful monitoring tool, the proposed impact evaluation system is feasible. The HFS Unit has included an impact evaluation system as a component of its proposed implementation plan for the national cost recovery program. The proposal includes sections on development, implementation, analysis and feedback, and integration into a national system. The individuals responsible for the impact evaluation system's implementation have been named. In conjunction with the Head of the Unit and the Chief Technical Advisor for Cost Recovery, they include officials from the MOH's departments of health statistics, primary care, and finance; officials from nongovernmental organizations; and others. A tentative timeline proposes that implementation of the impact evaluation system begin toward the end of 1994 and continue until its eventual integration into a national health statistics system (with a goal of two years).

Before the impact evaluation system is implemented, however, decisions must be made regarding the logistics, format, and mechanisms for reporting data. These recommendations should be made by the Unit members, with external technical assistance.

4.0 IMPLEMENTATION OF THE TRACKING SYSTEM

With the limited resources, an impact evaluation system in CAR initially would be best implemented on a sentinel site basis. All decisions are ultimately determined by MOH with recommendation from the Unit, but there are advantages to utilizing a sentinel system for impact evaluation: sentinel systems are not extremely expensive; there has been experience using them in CAR (with the PEV Program, for example); and the smaller numbers of sites involved in sentinel systems makes them more manageable. Criteria for choosing the sites must be determined from the HFS Unit, but sites should represent a wide distribution of effects under different circumstances, such as those with and without previous cost recovery experience, urban as well as rural locations, and those with different levels of inpatient and outpatient services.

An impact evaluation system that is simple and straightforward will prove the most efficacious and comprehensible. One single form to be completed monthly by accountants or financial managers at health facilities is all that should be required. The Unit will be responsible for training medical personnel and others how to fill out the form and for offering the reasoning behind all of the questions. The Unit then will be responsible for collecting completed reports from each sentinel site monthly and analyzing the information received.

The draft national cost recovery implementation plan proposes that the Central HFS Unit produce analytical reports of their own on a semi-annual, annual, and final basis during the anticipated two-year timespan. These reports will include overall observations, suggestions, and progress. The Unit also has the responsibility to provide feedback to the individual sentinel facilities regarding anything that the Unit may determine as being relevant or important. In addition to requiring monthly reports from sentinel sites, Unit members may want to periodically visit sites to see their cost recovery practices personally and to offer comments and input.

One of the people involved in the many decisions the Unit will have to make regarding the impact evaluation system will be the Chief of MOH's Division of Studies and Health Statistics. This division is currently in the process of implementing the new national system of health statistics (SNIS), the purpose of which is to "master the health situation in the population and drive activities in a guided manner." While this system was examined as an option for an impact indicator tracking system and while in its present form SNIS is capable of gathering much-needed health information, it is not yet nationally implemented and it does not ask for the financial and utilization information that is necessary to track cost recovery. The Division Chief, who will be involved in so much of the process of implementing the impact evaluation system, will see firsthand how the SNIS would need to be augmented to include financial information and will be the key resource person for integrating the impact evaluation system into SNIS in order to track cost recovery activities on a long-term basis.

With its questions regarding health outcomes and its ultimate incorporation of the impact evaluation system for cost recovery, the SNIS will become a comprehensive national system to provide both health and cost recovery outcome information. An additional benefit is that the comprehensive information system will be sustainable, given that it is sponsored by a division of the government and falls under a national policy.

5.0 CONCLUSION

The impact evaluation system should be seen as an opportunity to provide information, to help focus on problems, to quantify improvements or changes, and to help facilitate communication. While it is important to determine the impact of cost recovery on financing of the health care system, it is also important to determine the impact of cost recovery on the population. While the impact evaluation system does not directly measure health status or income effects on the population, it provides a framework and an infrastructure to indicate likely positive or negative effects on people's use of and expenditure for health services. It also provides information and lessons about the best ways of tracking cost recovery impact. For example, if in the long run it is determined that more information needs to be obtained about the health of the population, HFS Unit members may want to conduct exit interviews at facilities or surveys in local communities.

The experience gained from the impact evaluation system, however, also will be beneficial to other aspects of implementation. Another component of the draft overall national implementation plan for cost recovery is a national system of "Supervision, Tracking and Support." The individuals involved with creation of this national system will do well to consult with those involved in implementation, analysis, and feedback in the impact evaluation system. Their knowledge and experience will be paramount in creating an overall supervisory system that is efficient, responsible, and integral. The proposed impact evaluation system also will provide the necessary data to determine if cost recovery in the public health care system is meeting its objectives.